

Student Master

Supporting a Hypothesis with Data

**Your mission is to find evidence that supports or disproves this hypothesis:
Salinity concentrations vary at different locations within an estuary.**

Make your plan to support or disprove the hypothesis cited above. Choose one of the National Estuarine Research Reserves to study and plan your virtual fieldwork to collect the data you will need.

1. Visit www.dataintheclassroom.org and find the Water Quality module.
2. Follow the link to “Get Data.”
3. Using the form, select “Water Quality” from the list under “Which data?”
4. Using the map tools, drag and zoom the map until it is centered over one of the National Estuarine Research Reserves. Zoom in until you identify several separate stations at the same reserve.
5. Select one of the stations using the map or from the list of stations.
6. Choose “Salinity” from the list of available parameters.
7. Select a start date and duration to look at.
8. Click the “Get Data” button.
9. You can print the graph for later use or use a screen capture utility to save the image to your local computer.
10. Repeat as necessary to generate as many graphs as you need to support or disprove the hypothesis. Organize your findings in a brief report.

Hint: Can you support or disprove the hypothesis by looking at data from only one station? Zoom the map so that you can determine the location of each station within the reserve. Consider how the location of the station might impact the salinity.